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March 5, 2009

Mr. Ken Landau, Assistant Executive Officer
Ms. Diana Messina, Senior Engineer
Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, Suite 100
Rancho Cordova, CA 95670-6144

Via Email submission; Hardcopy if requested.

Re: Tentative Waste Discharge Requirements (NPDES Permit #CA0081621) and Tentative Cease and Desist Order for the Donner Summit PUD Wastewater Treatment Plant

Dear Mr. Landau and Ms Messina,

SYRCL requests status as a designated party of this proceeding. SYRCL is a 501(c)(3) community organization with the mission of protecting and restoring the Yuba River and greater Yuba watershed. SYRCL members reside along and recreate in the South Yuba River downstream of the point of discharge by the Donner Summit PUD.

The South Yuba River Citizens League (SYRCL) has reviewed the tentative NPDES Permit Renewal package for the Donner Summit PUD Wastewater Treatment Plant and submits the following comments.

1. The tentative NPDES permit provides no reduction in the period during which discharge to the South Yuba River may occur.

The basic purpose of the National Pollution Discharge Elimination System is to "eliminate discharge", yet this tentative permit may allow for discharge at times previously prohibited. In both WDR-55-2002-088, under which DSPUD currently operates, and in the tentative permit, discharge is allowed to occur "only when weather or snow conditions preclude land disposal". The tentative permit should emphasize this important prohibition by stating it in Section III. Most importantly, the discharger should be required to provide documentation of any infeasibility of land disposal in the late spring, summer and fall months according to an additional term described under Section VII (Compliance Determination). The term should clarify specific criteria to provide transparency around any determinations of land disposal being characterized as "impossible."

The tentative order prohibits discharge from August 1 to September 31 just as the current permit (WDR-2002-0088) does. The basic purpose of NPDES and several local facts support a longer period of prohibited discharge. The South Yuba River at the discharge point is an ephemeral stream and local residents have observed the channel becoming dry in July. Hydrologic data from the region provides evidence of decreasing spring snowpack and spring runoff in the region (see citations in below). Biostimulation in the late spring and early summer (e.g. August 2008 Notice of Violation) is partly the result of very low streamflows. The South Yuba River is particularly vulnerable to negative effects of additional nutrients during peak summer when solar radiation and temperatures are high. The beneficial uses of the river, including contact recreation, are also most intense during summer.

Discharge should be prohibited during the entire month of July. In the rare event of excessive late spring snowpack, discharge to the river in July could be allowed under special notification and rationale. In addition, rain and runoff records indicate support a prohibition on discharge to the river extending to at least October 15. We acknowledge that the spray fields used by DSPUD are located on north-facing slopes which may hold snow and wet conditions longer than typical land in the area. The poor location of these fields, or the cost to expand irrigation fields, are to cost to develop reclaimed water options are not valid deterrents to discharge prohibitions necessary to prevent pollution in the South Yuba River.

2. **Dilution credits for dichlorobromomethane and nitrate are based on flawed hydrological assumptions and inadequate data.**

No streamflow data exists for the South Yuba River at the point of discharge. All analyses of flow in DSPUD's Report of Waste Discharge and the tentative order rely on data from the Cisco gage located approximately 10 miles downstream. These analyses assume that the flow at the point of discharge is a stable 40.5% of flow at Cisco based on proportional watershed area. The assumption leads to dangerous inaccuracies as evidenced by the fact that at the end of extended dry seasons the flow at Cisco is typically 7-21 cfs while at the point of discharge the stream channel is dry. The method underestimates or misrepresents flows at the point of discharge due to at least four factors detailed in the comments submitted to your office by SYRCL on September 30, 2008.

Furthermore, the hydrologic data from Cisco used in the flow analysis included only the Water Years 1944-1993 (when USGS maintained the gage) and not the most recent 10-14 years of data which is available from PG&E. Data from the Cisco gage obtained by PG&E since 1994 is important to evaluating the history and future of flows at the point of discharge. Climate change models predict that due to decreasing snowpack, the South Yuba River will have less spring runoff (and dilution) than in the past *[Knowles, N. & Cayan, D. R. (2004) Clim. Change 62 , 319–336]*. According to Gary Freeman of PG&E (presenting on April 7, 2008 to the Energy Commission Meeting on Climate Change and Energy in California) snow survey records in the Yuba River watershed already show a significant decline in April 1st snow pack between the two periods 1945-1975 and 1976-

2006 *[Also see "Climate Change and California's Diminishing Low Elevation Snowpack", by G. Freeman to the Western Snow Conference 2003].*

The California Department of Water Resources has strongly suggested that statewide water management systems adapt with climate change *[http://www.water.ca.gov/climatechange/articles.cfm]*.
While NPDES permits are only issued for a period of 5 years, the Board has a responsibility to ensure that the most valid hydrologic data is used in determining any dilution credits, including accounting for the risk of diminishing dilution.

If DSPUD is to obtain dilution credits, then those determinations should be based on a Flow Study requiring the installation of a stream gage which continuously collects streamflow data under quality assurance criteria of the US Geologic Survey. With only a few years of data from the discharge point, this study could correlate flows at the point of discharge with the Cisco gage (still under operation by PG&E) to derive accurate estimates of dilution available in various months. The stream gage could be installed by the beginning of the 2010 Water Year (Oct. 1 2009) and a final flow study report submitted within two months of the end of three water years December 1, 2012. This schedule would allow for the possible final determination of valid dilution credits within the same interim period set in the tentative cease and desist order.

3. The Biostimulatory Study listed under section C (Special Provisions) is not described in subsection 2 (Special Studies).

The DSPUD plant caused biostimulation in the South Yuba River in June 2008 when the nitrate levels in their discharge measured 15-23 mg/L [August 2008 NOV] and this tentative CDO sets the interim discharge limit for nitrate at 53 mg/L and the final limit at 18 mg/L. Phosophorous, orthophosphate, manganese and other sources of nutrients are also present in the effluent and may contribute to biostimulation. A special study is very important to ensure an understanding of how the discharge is contributing to any biostimulation and how limits and additional monitoring may be warranted. The objectives, methods and reporting requirements of this study must be detailed in the tentative order so that they are subject to public review.

4. Interim limits for ammonia, nitrate, aluminum, manganese, copper, cyanide, aldrin, alpha BHC, silver, and zinc have been provided for the maximum period of 5 years.

The interim, performance-based limits for these substances represent unacceptable pollution to the South Yuba River. Final limits should be applied as soon as possible. Other than the question of dilution credits, very little uncertainty exists for DSPUD in knowing the final limits to be set in the new NPDES permit. The initial actions required to reduce pollution and meet forthcoming limits were known and feasible years ago. This tentative permit is 18 months overdue and, as we understand, the last of those in the region up for renewal. If the tentative permit grants DSPUD the maximum five years before new limits would apply, then the Board should provide a strong rationale why that

length of time is required for DSPUD to become compliant. We would suggest a more rigorous 3-year schedule, and propose 9 months of analysis/planning; 9 months for design and 18 months for construction of the upgrades necessary to meet discharge requirements.

5. Performance-based interim limits for nitrate and ammonia have been determined using an inappropriate period of data not reflective of plant upgrades completed in April 2007.

The interim limits for nitrate and ammonia set in the tentative permit are based on self-monitoring data from the period June 1, 2002 thru July 31, 2007. During all but the last four months of this period, a Cease and Desist Order (2002-0089) was in effect due to the recognition of the plant's inability to meet the final limits of WDR-2002-0088. The CDO expired in April 2007 at which time substantial plant upgrades were completed. Performance-based interim limits for ammonia and nitrates should be formulated using only the period subsequent to the CDO.

6. Interim limits for ammonia are provided based on a determination of infeasibility which is not supported by available data.

Our review of available data on ammonia in DSPUD effluent since April 2007 (expiration of the CDO and completion of plant upgrades) finds that the plant is capable of meeting standard and final limits. We request the remove ammonia from the tentative cease and desist order or a more thorough explanation of infeasiblity.

7. Receiving water monitoring requirements contain inadequate sampling frequencies for fecal coliform organisms and electrical conductivity.

DSPUD has violated waste discharge requirements for coliform organisms both prior to and subsequent to plant upgrades. The tentative monitoring requirements have a 1/Quarter sampling frequency for coliform. A more appropriate frequency would be 1/Month or 1/Week. Electrical conductivity is expensive to monitor and could be done at the same frequency (2/Week) as pH, dissolved oxygen, and temperature.

8. DSPUD's stated facility design flow is questionable and has been inappropriately used to set an "average dry weather" flow limitation.

In response to the Discharge Permit Summary, SYRCL submitted to the Central Valley Water Board on September 30, 2008 comments asking for reexamination of the actual capacity and design flow of the DSPUD plan. Our comments had attached minutes from a DSPUD meeting which included the following statement:

> "*Brentwood Industries estimated the plant could have a capacity to meet a peak flow of 0.44 MGD. This capacity estimate was based on the avorable ammonia concentration data from the licensed labs. A lower capacity would be estimated based on the results of the in-house lab results.*"

We have received no response on our earlier comment and request, but see that the asserted capacity of 052 mgd has been included in the tentative permit with no evidence of validation. Additionally, a different wording of the regulated monthly flow appears to permit greater discharge than the existing permit.

WDR-2202-0088 permitted DSPUD under the limitation that "The monthly average discharge flow shall not exceed 0.52 mgd" (B-5). While stating that no expansion of capacity has been granted, the tentative permit sets the same rate limit under the parameter "average dry weather flow". It is our understanding that this change in parameter would permit DSPUD to greater discharge during almost any month.

As noted under Findings, the tentative permit "prohibits a discharge greater then the existing regulated flow, based on an average dry weather flow, however, does not restrict the Discharger from serving new customers with its existing capacity". While it is clear that DSPUD could add many customers under the limitations of the tentative permit with minimal risk of exceeded tentative interim limits on all constituents, the use "average dry weather flow" appears to contradict the claim that the tentative order prohibits a discharge greater than existing regulated flow.

9. The nitrate limitation of 18 mg/L is a violation of the anti-backsliding requirements of the Clean Water Act.

As explained under Comment #2 above, the dilution credit for nitrate is based on a flawed study, and without an adequate hydrologic analysis, and dilution credit for nitrate represents an relaxing of the existing discharge limitation and a unwarranted risk to water quality in the South Yuba River.

10. Interim limits for ammonia, nitrate, as well as proposed final limit for nitrate of 18 mg/L, are not consistent with the intent of the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution 68-16.

The impact on existing water quality by these limits will be significant. This problem is addressed in comments #2-6 above.

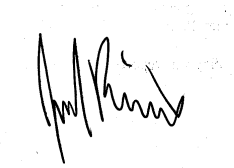
Summary of Requests for a Revised Order:

Based on the comments and information presented above, SYRCL respectfully requests that the tentative NPDES renewal package be revised as follows:

1. Prohibit discharge to river for the period July 1 – October 15.
2. Require compliance determination criteria for discharge to the river instead of land disposal or reclaimed water.
3. Require implementation of a Flow Study involving installation and maintenance of standard stream gage.
4. Remove dilution credits for all pollutants pending adequate flow data

5. Detail the Biostimulation Study so as to allow scientific review.
6. Reduce period of interim limits for ammonia, nitrate, aluminum, manganese, copper, cyanide, aldrin, alpha BHC, silver, and zinc from 5 years to 3 years.
7. Establish lower interim levels for nitrates and ammonia by analyzing only the data subsequent to April 2007 and the CDO period for R5-2002-0089.
8. Remove ammonia from the tentative cease and desist order or a more thorough explanation of infeasibility.
9. Increase sampling frequency for coliform and conductivity in receiving water.
10. Validate the design capacity of the DSPUD plant, and provide consistent terminology with the existing permit in limiting discharge rates.

Thank you for considering these comments. If you have any questions or require clarification, please contact us.



Jason Rainey, Executive Director

Gary Reedy, River Science Program Director